

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An active diffracted sound control apparatus comprising:

a sound source measuring device arranged on [[the]] a object sound source area side of a wall body arranged between the object sound source area and a sound receiving area for measuring [[the]] object sound information in the neighborhood of the wall body;

said object sound source area and said sound receiving area being within a same space and being separated by the wall body,

a direct object sound measuring device arranged on the sound receiving area side of the wall body for measuring the object sound information in the neighborhood of the wall body;

a control sound source arranged in the neighborhood of the wall body for generating a control sound to reduce the object sound at a virtual object sound measuring point in the sound receiving area; and

an object sound control device for controlling the output of the control sound based on the output of the object sound measuring device;

wherein the object sound control device is operated on the basis of a first sound transmission characteristic between [[the]] a direct object sound measuring point for the object sound source and the virtual object sound measuring point and

a second sound transmission characteristic between the direct object sound measuring point for the control sound source and the virtual object sound measuring point.

Claim 2 (Currently Amended): [[An]] The active diffracted sound control apparatus according to claim 1,

wherein the object sound control device alternates between a control section for generating the control sound and an identification section for obtaining a third sound transmission characteristic between the object sound source measuring device and the direct sound measuring device.

Claim 3 (Currently Amended): ~~[[An]]~~ The active diffracted sound control apparatus according to claim 1,

wherein the sound source measuring device, the direct object sound measuring device and the control sound source are configured integrally and installed removably on the wall body.

Claim 4 (Currently Amended): ~~[[An]]~~ The active diffracted sound control apparatus according to claim 1,

wherein the control sound source is arranged at the upper end portion of the wall body, and

wherein the direct object sound measuring device is arranged within the distance of the shortest wavelength of the frequency of the object sound from the upper end portion of the wall body.

Claim 5 (Currently Amended): An active diffracted sound controller comprising:  
a sound source measuring device arranged on ~~that~~ a part of a wall body having an opening between a controlled sound source area and a sound receiving area which is nearer to the controlled sound source area for measuring ~~[[the]]~~ controlled sound information in the neighborhood of the opening;

said controlled sound source area and said sound receiving area being within a same space and being separated by the wall body;

a direct controlled sound measuring device arranged on the part of [[the]] a opening nearer to the sound receiving area for measuring the controlled sound information in the neighborhood of the opening;

a control sound source arranged in the neighborhood of the opening for generating a control sound for reducing the controlled sound at a virtual controlled sound measuring position in the sound receiving area; and

a controlled sound control device for controlling the output of the control sound based on the output of the direct controlled sound measuring device;

wherein the controlled sound control device is operated based on a first sound transmission characteristic of the controlled sound source between [[the]] a direct controlled sound measuring position and the virtual controlled sound measuring position, and a second sound transmission characteristic of the control sound source between the direct controlled sound measuring position and the virtual controlled sound measuring position.

Claim 6 (Currently Amended): [[An]] The active diffracted sound controller according to claim 5,

wherein the controlled sound control device is operated alternately in a control section for generating a control sound and an identification section for producing a third sound transmission characteristic of the controlled sound source between [[the]] a controlled sound source measuring device and the direct sound measuring device.

Claim 7 (Currently Amended): [[An]] The active diffracted sound controller according to claim 5,

wherein the sound source measuring device, the direct controlled sound measuring device and the control sound source are configured integrally and adapted to be arranged removably on the opening.

Claim 8 (Currently Amended): ~~[[An]]~~ The active diffracted sound controller according to claim 5,

wherein the control sound source is arranged at the upper end portion of the wall body; and

wherein the direct controlled sound measuring device is arranged within the distance of the shortest wavelength of the frequency of the controlled sound from the edge portion of the opening.

Claim 9 (Currently Amended): An active diffracted sound control method comprising:

a sound source measuring the controlled sound information at a sound source measuring position in the neighborhood of ~~that~~ a part of a wall body which is nearer to ~~[[the]]~~ a controlled sound source area, the wall body being arranged between the controlled sound source area and ~~[[the]]~~ a sound receiving area, and the sound source measuring being performed using a sound source measuring device;

said controlled sound source area and the sound receiving area being within a same space and being separated by the wall body,

a direct controlled sound measuring the controlled sound information at a direct controlled sound measuring position in the neighborhood of that part of the wall body which is nearer to the sound receiving area, the direct controlled sound measuring being performed using a direct object sound measuring device;

a control sound generating a control sound, at a control sound generating position in the neighborhood of the wall body, for reducing the controlled sound at a virtual controlled sound measuring position in the sound receiving area, the control sound generating being performed using a control sound source; and

a controlled sound controlling the output of the control sound based on the output from the information of the controlled sound measured in the direct controlled sound measuring, the controlled sound controlling being performed using an object sound control device;

wherein the controlled sound controlling is operated based on a first sound transmission characteristic of the controlled sound between the direct controlled sound measuring position and the virtual controlled sound measuring position, and a second sound transmission characteristic of the control sound between the direct controlled sound measuring position and the virtual controlled sound measuring position.

Claim 10 (Original): The [[An]] active diffracted sound control method according to claim 9,

wherein said controlled sound controlling is executed alternately in a control section for generating a control sound and an identification section for producing a third sound transmission characteristic of the controlled sound between the controlled sound source measuring position and the direct sound measuring position.

Claim 11 (Original): The [[An]] active diffracted sound control method according to claim 9,

wherein the control sound generating position is at the upper end portion of the wall body, and

wherein the direct controlled sound measuring position is within the distance of the shortest wavelength of the frequency of the controlled sound from the upper end portion of the wall body.

Claim 12 (Currently Amended): An active diffracted sound control method comprising:

a first sound transmission characteristic measuring a first sound transmission characteristic of [[the]] a controlled sound between [[the]] a direct controlled sound measuring position in the neighborhood of [[the]] a part of the wall body nearer to [[the]] a sound receiving area and [[the]] a virtual controlled sound measuring position on the part of the wall body nearer to the sound receiving area, the wall body being arranged between [[the]] a controlled sound source area and the sound receiving area, and the first sound controlled sound;

said controlled sound source area and the sound receiving area being within a same space and being separated by the wall body,

a second sound transmission characteristic measuring a second sound transmission characteristic of the control sound between the direct controlled sound measuring position and the virtual controlled sound measuring position, the second sound transmission characteristic measuring being performed using a sound measuring device when performing control for reducing a sound pressure of a control sound;

a sound source measuring the controlled sound information at a sound source measuring position, the direct controlled sound measuring being performed using a direct object sound measuring device;

a direct controlled sound measuring the controlled sound information at the direct controlled sound measuring position, the direct controlled sound measuring being performed using a direct object sound measuring device;

a control sound generating a control sound at a control sound generating position in the neighborhood of the wall body for reducing the controlled sound at the virtual controlled sound measuring position, the control sound generating being performed using a control sound source; and

a controlled sound controlling the output of the control sound based on the output from the information of the controlled sound measured in the direct controlled sound measuring, the first sound transmission characteristic and the second sound transmission characteristic, the controlled sound controlling being performed using an object sound control device.

Claim 13 (Currently Amended): [[An]] The active diffracted sound control method according to claim 12,

wherein the controlled sound controlling is executed alternately between a control section for generating the control sound and an identification section for producing a third sound transmission characteristic of the controlled sound between the controlled sound source measuring position and the direct sound measuring position.

Claim 14 (Currently Amended): [[An]] The active diffracted sound control method according to claim 12,

wherein the control sound generating position is at the upper end portion of the wall body, and the direct controlled sound measuring position is within the distance of the shortest

wavelength of the frequency of the controlled sound from the upper end portion of the wall body.

Claim 15 (New): The active diffractive sound control apparatus of claim 1, wherein the control sound source is located above the top of the wall body.

Claim 16 (New): The active diffracted sound controller of claim 5, wherein the control sound source is located above the top of the wall body.

Claim 17 (New): The active diffracted sound control method of claim 9, further comprising the step of wherein the control sound source is located above the top of the wall body.

Claim 18 (New): The active diffracted sound control method of claim 12, further comprising the step of wherein the control sound source is located above the top of the wall body.

Claim 19 (New): The active diffracted sound control apparatus of claim 1, wherein the control sound source is located in the vicinity of the inner edge of the opening of the wall body.

Claim 20 (New): The active diffracted sound controller of claim 5, wherein the control sound source is located in the vicinity of the inner edge of the opening of the wall body.



Claim 21 (New): The active diffracted sound control method of claim 9, further comprising the step of wherein the control sound source is located in the vicinity of the inner edge of the opening of the wall body.

Claim 22 (New): The active diffracted sound control method of claim 12, further comprising the step of wherein the control sound source is located in the vicinity of the inner edge of the opening of the wall body.